UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,380	08/13/2001	Satyendra Yadav	42390P11648	1017

8791	7590	06/21/2006	EXAMINER

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

	BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/929,380	YADAV, SATYENDRA
	Examiner	Art Unit	
	Lewis A. Bullock, Jr.	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>*31 May 2006*</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *5-12,32-45 and 65-78* is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) *32-38 and 65-71* is/are allowed.
6) ☒ Claim(s) *5-12,39-45 and 72-78* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on <u>*20 July 2005*</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a) ☐ All   b) ☐ Some * c) ☐ None of:
       1. ☐ Certified copies of the priority documents have been received.
       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____ .
4) ☒ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 5-12, 39-45 and 72-78 are rejected under 35 U.S.C. 103(a) as being

unpatentable over SUNG (U.S. Patent 6,226,684) in view of TSUKAKOSHI (EP 0969

630 A1).

As to claim 5, SUNG teaches a system comprising: a system (data center), the

system coupled with a network (col. 3, lines 51-53); a number of dispatchers (router)

coupled with the system, each of the dispatchers having a local dispatch table (router

table) wherein at least two of the dispatchers share a session entry (table entry)

identifying a client (client) and a selected server (server) (via the multicast message

synchronizing table entries such that any router can send communications to the same

server); and a plurality of servers (servers), each of the plurality of servers coupled with

each of the number of dispatchers; wherein the system directs each communication

received from the network to one of the number of dispatchers, the one dispatcher to

determine which of the plurality of servers is to receive the communication (via the

router sending a message to one of the servers or a previous selected server as

detailed by the IP cache table or routing table) (col. 3, line 51 – col. 4, line 7; see figs. 3

and 4; col. 5, lines 20-58; col. 6, lines 10-30). However, SUNG does not teach that the

system is a router.

TSUKAKOSHI teaches a clustered router comprising a plurality of routers

wherein each router shares updated information with the other routers (see abstract; pg.

2, paragraph 0008-0012; pg. 3, paragraph 0018-0021). It would be obvious to one of

ordinary skill in the art that the data center system of SUNG is the router of

TSUKAKOSHI and therefore the routers are updated as indicated by the teachings of

SUNG. Therefore, it would be obvious to one of ordinary skill in the art to combine the

teachings of SUNG with the teachings of TSUKAKOSHI in order to facilitate network

information sharing wherein each router allows network information collected by routing

protocols running in a plurality of routers to be shared (pg. 2, paragraph 0009).

As to claim 39, SUNG teaches a method comprising: receiving a packet

(message) at a system (data center) coupled with a plurality of dispatchers (routers), the

packet (message) including a connection request from a client (client); transmitting the

packet from the system (data center) to a first dispatcher (router) of the plurality of

dispatchers (routers); selecting a server (server) from a plurality of servers (servers)

coupled with the plurality of dispatchers (routers); placing a session entry (table entry) in

a local dispatch table (router table) of the first dispatcher (router), the session entry

identifying the client (client) and the selected server (server); broadcasting a dispatch

table update from the first dispatcher (router) to all other dispatchers (routers) of the

plurality of dispatchers (via the multicast message to synchronize the tables of all

routers), the dispatch table update identifying the client (client) and the selected server (server); transmitting the packet to the selected server (server); receiving a second packet at the system from the client; and transmitting the second packet from the system to a second dispatcher of the plurality of dispatchers, the second dispatcher to search a local dispatch table of the second dispatcher to identify the selected server and transmit the second packet to the selected server (via establishing a new second communication with the data center such that the router directs the second request to the same server) (see figs. 3 and 4; col. 5, lines 20-58; col. 6, lines 10-30; col. 4, line 49-col. 5, line 33). However, SUNG does not teach that the system is a router.

TSUKAKOSHI teaches a clustered router comprising a plurality of routers wherein each router shares updated information with the other routers (see abstract; pg. 2, paragraph 0008-0012; pg. 3, paragraph 0018-0021). It would be obvious to one of ordinary skill in the art that the data center system of SUNG is the router of TSUKAKOSHI and therefore the routers are updated as indicated by the teachings of SUNG. Therefore, it would be obvious to one of ordinary skill in the art to combine the teachings of SUNG with the teachings of TSUKAKOSHI in order to facilitate network information sharing wherein each router allows network information collected by routing protocols runnin in a plurality of routers to be shared (pg. 2, paragraph 0009).

As to claim 40, SUNG teaches selecting a communication link from a plurality of communication links (via selecting a router), each of the plurality of communication links coupling one of the plurality of dispatchers (router) with a port of the system (data

center); and transmitting the packet (message) over the selected communication link to

the first dispatcher (router) (see figs. 3 and 4; col. 5, lines 20-58; col. 6, lines 10-30).

As to claim 41, SUNG teaches randomly selecting the communication link from

the plurality of communication links (see figs. 3 and 4; col. 5, lines 20-58; col. 6, lines

10-30).

As to claim 42, SUNG teaches determining a load on each of the plurality of

servers (servers); and selecting the server at least partially in response to the load on

the server (server) (col. 10, lines 6-21; col. 9, lines 40-53).

As to claim 44, SUNG teaches the first dispatcher and the second dispatcher

comprise the same dispatcher of the plurality of dispatchers (via the same or different

dispatchers both having the capability of sending connection request to the same server

based on the table entries) (see figs. 3 and 4; col. 5, lines 20-58; col. 6, lines 10-30; col.

4, line 49-col. 5, line 33).

As to claims 72-75 and 77, refer to claims 39-42 and 44 for rejection.

As to claims 9 and 10, SUNG teaches a number of dispatchers are coupled with

a port of the system (via the routers being linked to the data center such that when it

receives a message it is sent to a router) and substantially discloses the invention

above. However, SUNG does not teach the router exhibiting port trunking by having

identical network addresses.

TSUKAKOSHI teaches the router (router device / cluster-type router) exhibiting

port trunking and the first dispatcher (router node) and second dispatcher (router node)

exhibiting identical network addresses (no need to assign sub-net addresses) (pg. 8,

paragraph 0089-0091) wherein each router device distributes update information to

other router devices (see abstract; pg. 2, paragraph 0008-0012; pg. 3, paragraph 0018-

0021).

As to claims 6-8, SUNG teaches a network with multiple routers for

communicating a client to a server (col. 4, lines 42-48). However, SUNG does not

teach that the network is a system area network or a LAN, WAN, or MAN. Official

Notice is taken in that a system area network exhibiting InfiniBand architecture, LAN,

WAN, and MAN are well known in the art and therefore would be obvious in view of the

teachings of SUNG in order to facilitate the reconnection of clients to respective servers

in a system area network, LAN, WAN, or MAN environment.

As to claims 11 and 12, SUNG teaches selecting the server at least partially in

response to the identified application (via selecting the server based on the content

groups cached by the server) (col. 10, lines 6-22). It would be obvious to one skilled in

the art that there must exist different content group, i.e. applications, since the servers

are selected based on the content groups.

As to claim 43, SUNG teaches selecting the server at least partially in response to the identified application (via selecting the server based on the content groups cached by the server) (col. 10, lines 6-22). It would be obvious to one skilled in the art that the content group, i.e. application, of the packet must be identified in order to select a server based on the content group.

As to claim 45, SUNG teaches routing a packet from the dispatcher (router) to the selected server (server) (see figs. 3 and 4; col. 5, lines 20-58; col. 6, lines 10-30). It would be obvious to one of ordinary skill in the art that in order to route the request one would have to change the network address of the message from the dispatcher set by the client to the server set by the dispatcher.

As to claims 76 and 78, refer to claims 43 and 45 for rejection.

Allowable Subject Matter

3.   Claims 32-38 and 65-71 are allowed.

Response to Arguments

4.   Applicant's arguments with respect to claims 5-12, 39-45 and 72-78 have been considered but are moot in view of the new ground(s) of rejection.
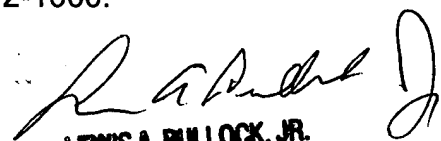
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 19, 2006

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER